AUTODOC CLUB

How to change rear shock absorbers on **BMW X3 E83** – replacement guide

VIDEO TUTORIAL



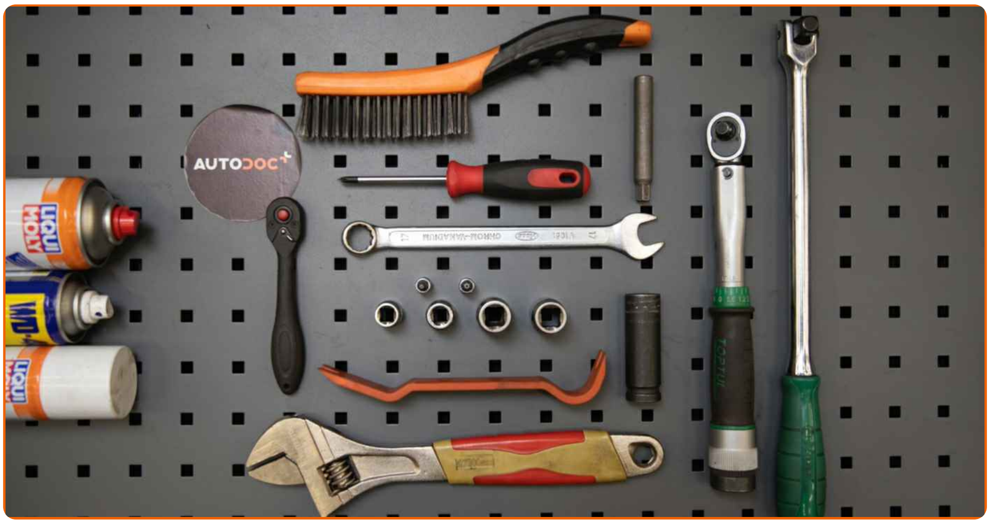
Important!

This replacement procedure can be used for:
BMW X3 (E83) xDrive 20 d, BMW X3 (E83) xDrive 30 d, BMW X3 (E83) 3.0 i xDrive, BMW X3 (E83) 3.0 d, BMW X3 (E83) 2.0 d, BMW X3 (E83) 2.0 i, BMW X3 (E83) 3.0 si, BMW X3 (E83) 2.5 si, BMW X3 (E83) 3.0 sd, BMW X3 (E83) xDrive 20 i, BMW X3 (E83) xDrive 25 i, BMW X3 (E83) xDrive 30 i, BMW X3 (E83) xDrive 18 d, BMW X3 (E83) xDrive 35 d, BMW X3 (E83) 2.5 si xDrive

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The steps may slightly vary depending on the car design.

REPLACEMENT: SHOCK ABSORBERS – BMW X3 E83. LIST OF THE TOOLS YOU'LL NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Torque wrench
- Combination spanner #17
- Drive socket # 10
- Drive socket # 13
- Drive socket # 16
- Drive socket # 18
- Torx bit T20
- Torx bit T25
- Shock absorber socket #DD6
- Wheel impact socket #17
- Ratchet wrench
- Adjustable wrench
- Plastic trim tool
- Phillips screwdriver
- Tap wrench
- Vice
- Hydraulic transmission jack
- Wheel chock

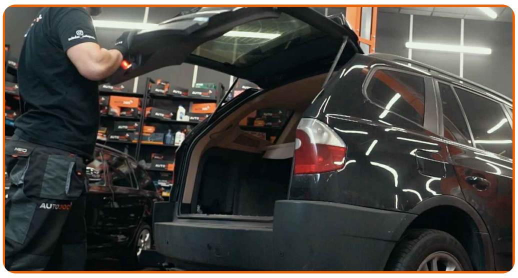
BUY TOOLS

Replacement: shock absorbers – BMW X3 E83. Tip from AUTODOC:

- Both shock absorbers of the rear suspension should be replaced simultaneously.
- The replacement procedure is identical for the left and right shock absorbers of the rear suspension.
- All work should be done with the engine stopped.

REPLACEMENT: SHOCK ABSORBERS – BMW X3 E83. USE THE FOLLOWING PROCEDURE:

1 Open the boot lid.



2 Move the folding shelf and detach it from the retainers. By doing this, you will get access to the side trim plastic panels.



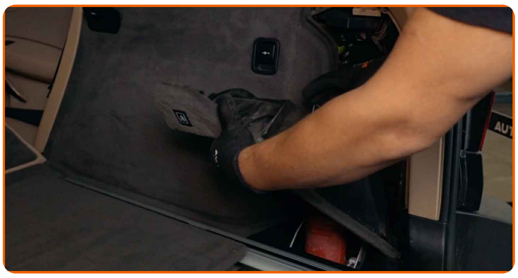
3 Fold down the backrests of the rear seats.



4 Raise the lower lining of the boot.



5 Detach the boot side lining.



6 Unscrew the fasteners of the plastic car body protective cover. Use a Phillips screwdriver.



7 Remove the rubber strip.



8 Remove the plastic car body protective cover.



9

Remove the interior boot light.



10

Remove the seat belt trim cover.



11

Detach the boot rear side lining.

12

Unscrew the fasteners of the side plastic trim panel. Use a drive socket #10. Use a ratchet wrench.



13

Remove the clips from the parcel shelf. Use Torx T25. Use a ratchet wrench.



14

Detach the parcel shelf.

15 Remove the airbag cover. Use a plastic trim tool.



16 Unscrew the fastener of the body pillar trim panel. Use Torx T20. Use a ratchet wrench.

17 Remove the body pillar trim panel.



18 Unscrew the fasteners of the seat belt panel. Use a Phillips screwdriver.



19 Remove the seat belt panel.



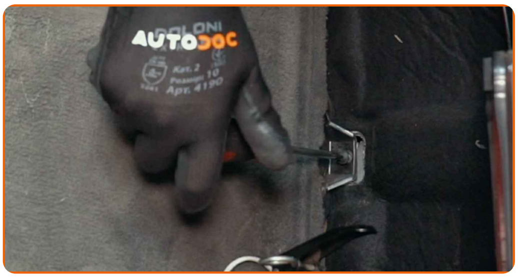
20 Remove the side plastic cover.



21 Remove the clips of the boot side lining. Use a plastic trim tool.



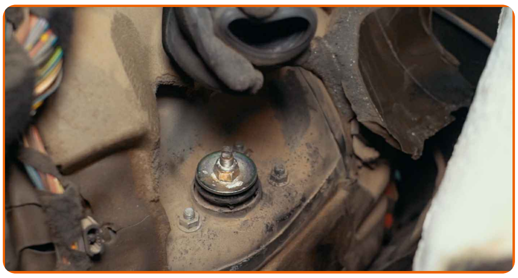
22 Unscrew the fastener of the boot side lining. Use a Phillips screwdriver.



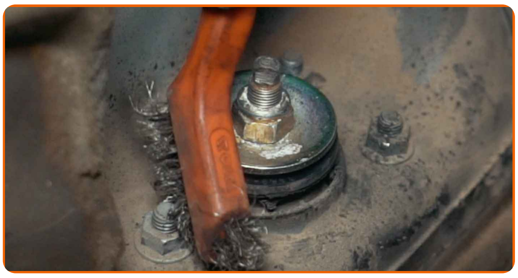
23 Detach the boot side lining.



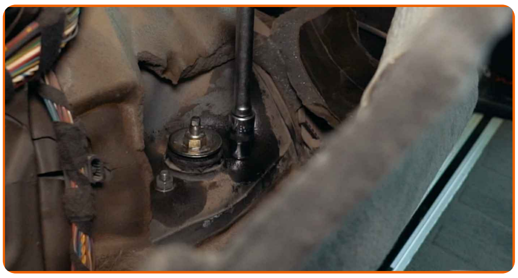
24 Remove the protective cap of the shock absorber mount.



25 Clean the shock absorber fasteners. Use a wire brush. Use WD-40 spray.



26 Loosen the upper fastener of the shock absorber. Use a drive socket #13. Use a ratchet wrench.

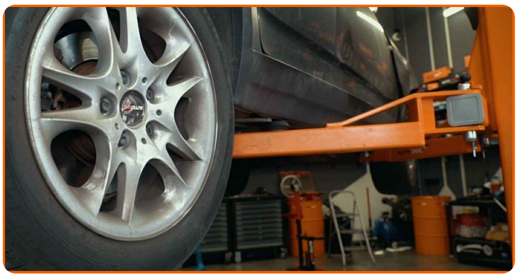


27 Secure the wheels with chocks.

28 Loosen the wheel mounting bolts. Use wheel impact socket #17.



29 Raise the rear of the car and secure on supports.



30 Unscrew the wheel bolts.



AUTODOC recommends:

- Important! Hold the wheel while unscrewing the fastening bolts. BMW X3 E83

31 Remove the wheel.



32 Support the arm. Use a hydraulic transmission jack.



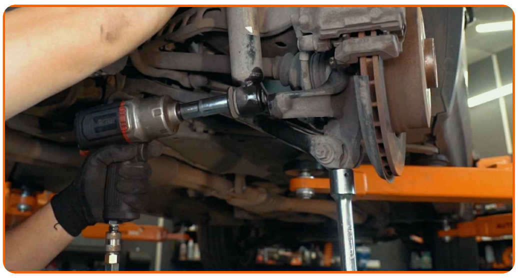
33 Clean the shock absorber fasteners. Use a wire brush. Use WD-40 spray.



34 Unscrew the upper fastener of the shock absorber. Use a drive socket #13. Use a ratchet wrench.



35 Unscrew the lower fastener of the shock absorber. Use a drive socket #18. Use a tap wrench.

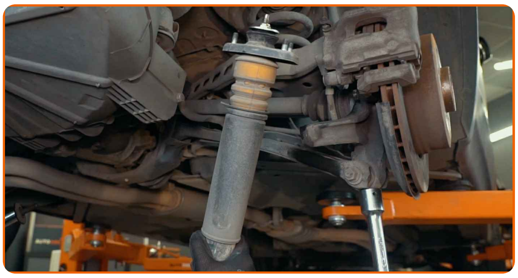


36 Remove the fastening bolt.

AUTODOC recommends:

- BMW X3 E83 – To avoid injury, hold the shock absorber while unscrewing the fastening bolts.

37 Remove the shock absorber.



38 Grip the shock absorber in a vice.

39 Clean the shock absorber rod fastener. Use a wire brush. Use WD-40 spray.



40 Remove the shock absorber piston rod fastening. Use a shock absorber socket DDNº6. Use a drive socket #16. Use a ratchet wrench.



41 Remove the shock absorber mount, boot and bump stop.



AUTODOC recommends:

- Replacement: shock absorbers – BMW X3 E83. Carefully inspect the mount, the boot, and the bump stop of the shock absorber. Replace if necessary.
- Before installing a new shock absorber you should pump it manually 3-5 times.

42 Install the mount, boot and bump stop onto a new shock absorber.



43 Tighten the shock absorber rod nut. Use a combination spanner #17. Use a shock absorber socket №DD6. Use an adjustable wrench. Use a torque wrench. Tighten it to 14 Nm torque.



44 Treat the shock absorber rod fastener. Use copper grease.



45 Release the vice and take out the shock absorber.



46 Clean the shock absorber mounting seats. Use a wire brush. Use WD-40 spray.



47 Place the shock absorber in the wheel arch and fasten it.



AUTODOC recommends:

- BMW X3 E83 – To avoid injury, hold the shock absorber while screwing in the fastening bolts.

48 Install the fastening bolt.



49 Tighten the lower fastener of the shock absorber. Use a drive socket #18. Use a torque wrench. Tighten it to 100 Nm torque.



50 Remove the support from under the arm.



AUTODOC recommends:

- BMW X3 E83 – Do not lower the transmission jack sharply to avoid damaging components and mechanisms of the car.

51 Treat the shock absorber fasteners. Use copper grease.

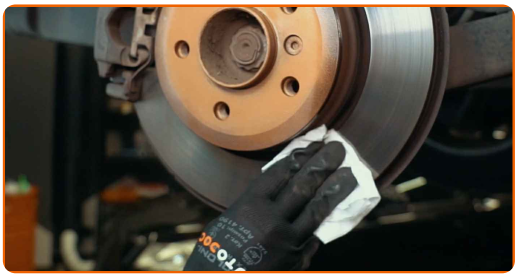
52 Clean the wheel rim mounting seat. Use a wire brush.



53 Treat the surface where the brake disc contacts the wheel rim. Use copper grease.



54 Clean the brake disk surface. Use a brake cleaner.



AUTODOC recommends:

- After applying the spray, wait a few minutes.

55 Install the wheel.



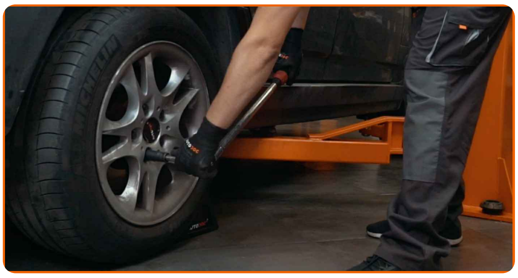
AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. BMW X3 E83

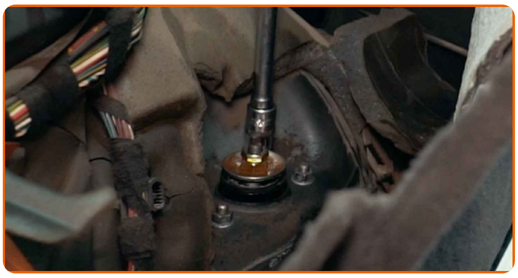
56 Screw in the wheel bolts. Use wheel impact socket #17.



57 Lower the car and working in a cross order, tighten the wheel bolts. Use wheel impact socket #17. Use a torque wrench. Tighten it to 140 Nm torque.



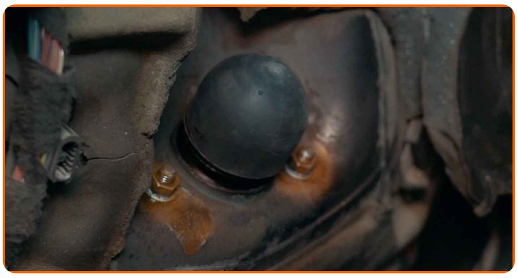
58 Tighten the top shock absorber fastening. Use a drive socket #13. Use a torque wrench. Tighten it to 24 Nm torque.



59 Treat the shock absorber fasteners. Use copper grease.



60 Install the protective cap of the shock absorber mount.



61 Attach the side lining of the boot.



62 Screw in the fastener of the boot side lining. Use a Phillips screwdriver.



63 Reinstall the parcel shelf.

64 Reinsert the parcel shelf clips. Use Torx T25. Use a ratchet wrench.



65 Install the side plastic panel.

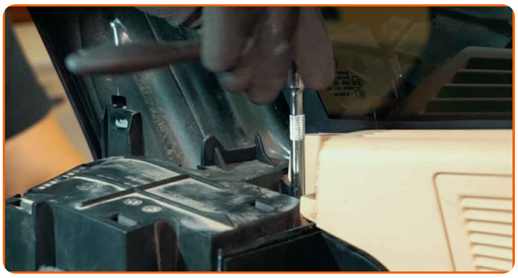


66 Reinstall the seat belt panel.



67 Screw in the fasteners of the seat belt panel. Use a Phillips screwdriver.

68 Screw the fasteners of the side plastic trim panel. Use a drive socket #10. Use a ratchet wrench.



69 Attach the body pillar trim panel.



70 Screw in the fastener of the body pillar trim panel. Use Torx T20. Use a ratchet wrench.

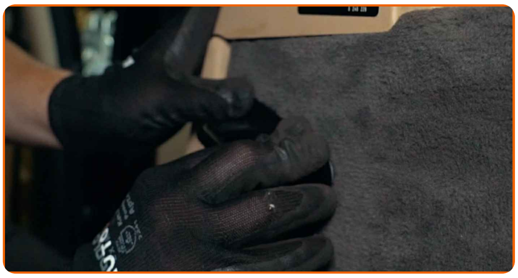


71 Install the airbag cover.



72 Install the boot rear side lining.

73 Install the seat belt trim cover.



74 Install the clips of the boot side lining.

75 Install the interior boot light.

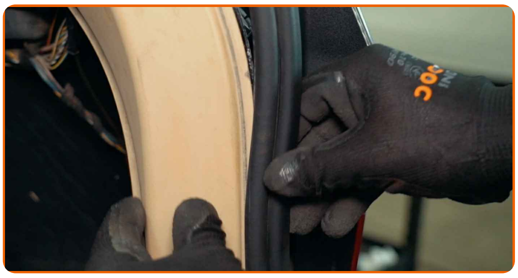
76 Reinstall the plastic car body protective cover.



77 Screw in the fasteners of the plastic car body protective cover. Use a Phillips screwdriver.



78 Install the rubber strip.



79 Attach the side lining of the boot.

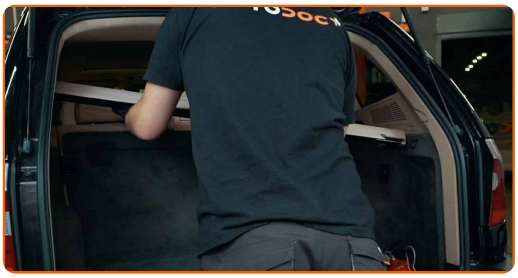


80 Put down the lower lining of the boot.

81 Return the seat to its original position.



82 Install the folding shelf to its mounting seat.



83 Close the lid of the luggage compartment.



84 Remove the jacks and chocks.

WELL DONE!

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